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ABSTRACT

Vocational-technical education (VTE) today encompasses a diverse array of programs to equip students with work and life skills. A widening skills gap in the nation's work force, coupled with the fact that only about 20% of the nation's current jobs require a four-year college degree, has made VTE more important than ever before. Research has confirmed the following: VTE graduates earn more than nonvocational high school graduates, VTE trains students for well-paying in-demand occupations, VTE can help students with disabilities perform better in school and find jobs afterwards, and VTE participation decreases educationally disadvantaged students' risk of dropping out. VTE's success has been attributed to the following: its balance of basic and occupational skills, tech prep, its hands-on approach, on-the-job training, and vocational student organizations. Hundreds of programs available to VTE students generally fall into the major areas of health occupations, business, trade and industrial, agricultural, marketing, technology, home economics, and technical education. Included among the more than 20,000 U.S. institutions currently offering VTE programs are more than 11,000 comprehensive schools, nearly 1,400 secondary area vocational-technical centers, and nearly 9,400 postsecondary institutions. VTE maintains strong links to business and community and is supported by a combination of federal, state, local, and private business funds. (MN)

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Vocational-Technical Education Today

American Vocational Association

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Vocational-Technical Education Today

What Is It?

Today vocational-technical education (vo-tech) encompasses a great variety of programs designed to equip students with work and life skills. In them students explore career options and develop the skills they'll need to be successful in the workplace.

About half the nation's high school students—3.6 million—participate in about 94,000 vo-tech programs in 11,600 schools, a 1993 report by the U.S. General Accounting Office found. And 97 percent of all high school students take at least one vocational course, according to the National Assessment of Vocational Education. Vo-tech programs also are offered in more than 9,000 community colleges, technical institutes and universities.

The vo-tech curriculum's unique combination of classroom instruction, hands-on laboratory work and on-the-job training—augmented by an active network of student organizations—gives students the knowledge and practical experience they need to succeed in such diverse fields as computer science, business, health services, marketing and retail sales, high-tech manufacturing and agriculture.

Vocational-technical education is a springboard to immediate employment for many high school graduates. But increasing numbers of young people rely on vocational education to prepare for college and other types of postsecondary learning. In fact, nearly two-thirds of all high school vocational graduates enter some form of postsecondary program.

Also, millions of adults turn to vo-tech programs each year to acquire basic work skills, retrain for new jobs and learn new skills to keep up with the changing technological requirements of the workplace.

Preparing Students for Meaningful Work

A widening skills gap in the nation's workforce has made vocational-technical education more important today. Only about 20 percent of America's current jobs require a four-year college degree. At the same time, the nation's need for low-skilled and semi-skilled labor is dwindling.

Vocational-technical education fills that gap by preparing students for the bulk of America's jobs, which require education below the baccalaureate level but often beyond high school. These jobs include more than 400 occupations, including 18 of the 20 fastest growing of the 1990s. Medical assistants, home health aides, data processing equipment repair technicians, financial services sales people and technicians in many other fields all can learn their jobs in vo-tech programs.

Today's vocational educators work closely with employers to make sure students have the skills the labor market demands.

Vocational-Technical Education Produces Results!

Job Placement —It's easier for vo-tech graduates to get jobs! A 1991 New York study of 76,000 secondary vocational graduates found that six to 18 months after graduation, 91 percent of them were productively employed, in the military or enrolled at postsecondary institutions.

A recent large-scale study of 13,000 Ohio vocational education graduates' income tax records indicated that seven years after high school, the vocational graduates earned significantly more than a comparable group of non-vocational graduates. And the earnings gap

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between the two groups continued to widen with time.

Good Jobs and Good Pay—A recent follow-up study of Kansas postsecondary vo-tech associate degree recipients showed that graduates of the dental hygienist program were earning an average of $34,661 six months after graduation! All 14 graduates of the radiation therapy program were employed after six months earning an average salary of $33,120! Graduates of 22 occupational programs offered by Kansas community colleges and area vocational schools were earning average salaries of $20,000 or more only six months after graduation.

Vo-tech education trains students for in-demand, well-paying occupations such as these: computer programming, mortuary science, biomedical equipment technician, civil technology, energy technology, water and wastewater technology, alcohol awareness, radiological technology, respiratory therapy technician, associate degree nursing, chemical technology, fire science, law enforcement, electrician, lineman, aircraft mechanic, computer systems technician (repair), cooling and refrigeration installation, electronic occupations, and heating, refrigeration and air conditioning technician.

Individuals with Disabilities—Vo-tech education can help students with disabilities perform better in school and find jobs afterward. A recent study of 8,000 students with disabilities showed that those in vo-tech programs are more likely than those who are not to:

- ✔ Have better attendance
- ✔ Stay in school
- ✔ Attend postsecondary vocational programs
- ✔ Have a job after two years

Dropout Prevention—For many young people, vocational-technical education is the difference between staying in school and dropping out. A New York City Board of Education study of dropout-prone high school students found that students who earn vocational credits tend to remain in school. In fact, the dropout rate for non-vocational students was almost three times as high as the rate for vocational students.

Vo-tech education offers a better chance for educationally disadvantaged students—apparently by offering a curriculum more relevant to student interests. A major city study that compared disadvantaged students randomly assigned to "career" magnet high schools with those assigned to general academic high schools showed that those in the career schools advanced more in reading skills and earned more course credits than those in the general schools.

Why It Works

Balancing Basic and Occupational Skills—About 60 percent of vocational students are enrolled in programs that teach basic skills, often called employability skills. Others are in occupation-specific skills programs that prepare students for a particular job or cluster of jobs.

Vo-tech programs take a variety of forms at different levels. Some last up to four years and in addition to offering training in specific technical skills provide applied academic courses in math, science and communication skills. Others are brief and intensive—for example, a customized training program offered by a community college to employees and prospective employees of a single business.

Increasingly vocational and academic education is being integrated in intellectually rigorous courses centered on clusters of occupational skills and interests. The resulting course of study is an academically challenging alternative to the college prep regimen followed in most high schools.

Tech Prep—Vocational-technical education has sought innovative ways to structure education. Tech Prep, often called 2 + 2, combines the last two years of high school with two years of postsecondary education to prepare students for the high-skill jobs that require more than a high school diploma. Those jobs—in engineering, health occupations, computer services and other technical fields—are among the fastest growing in the nation.

Hands-on Approach—Vocational-technical education uses a hands-on approach that teaching experts believe is more effective with many students than reading a textbook or listening to lectures. Students also tend to learn better when

they can relate what they are learning to their future careers.

On-the-Job Training—Vo-tech also succeeds by moving instruction out of the classroom. More than a half million students participate in co-op or apprenticeship programs, which combine classroom instruction and on-the-job learning.

Vocational Student Organizations—Ten national VSOs serve more than 2 million secondary and postsecondary students. Local VSO chapters help students develop leadership skills and positive work values while reinforcing the vocational curriculum.

Areas of Study

The hundreds of programs available to vo-tech students usually fall into these eight major areas of study:

- ☐ Health occupations, such as nursing, medical and dental assistants and radiologic technicians.
- ☐ Business education, including accounting, office occupations and business management programs.
- ☐ Trade and industrial education, which imparts occupational skills in a range of trades, including auto mechanics, construction, manufacturing, graphic arts and cosmetology.
- ☐ Agriculture, including horticulture, agricultural mechanics and agribusiness.
- ☐ Marketing education, including general merchandising and the marketing of apparel and accessories, real estate and financial, business and personal services.
- ☐ Technology education, including engineering, architecture, drafting, electronic communications, graphic arts, biotechnology, and transportation.
- ☐ Home economics, which encompasses consumer and homemaking education as well as occupational fields such as food services and professional child care.
- ☐ Technical education, which involves instruction at the postsecondary level in a variety of technical occupational fields, such as communications, engineering-related technologies and computer sciences.

Where It Is Offered

More than 20,000 institutions across the country offer vo-tech programs. These include:

- More than 11,000 general or comprehensive high schools, where programs are offered in as many as six or more different vocational subjects, but the majority of students do not concentrate in vocational studies.
- Several hundred vocational high schools, which offer full-time programs of study in both academic and vocational subjects and where most of the students are enrolled in vocational education programs.
- Almost 1,400 secondary area vo-tech centers. These are shared-time facilities that provide only vocational education. Students receive the academic portion of their education at regular high schools or other institutions in the region or school system served by the vo-tech center.
- At the postsecondary level nearly 9,400 postsecondary institutions offer vocational programs. These include area vocational schools, technical institutes, skill centers and other specialized schools as well as community colleges and public and private two- and four-year colleges, which offer general academic programs as well.

Links to Business and the Community

Because vocational-technical education is so critical to the nation's skilled labor pool, the field maintains close ties with business and industry.

To help keep pace with changing job requirements, technologies and labor market needs, many vo-tech programs work closely with advisory councils that include local employers from a variety of business fields. In all, more than 200,000 representatives from business, industry, labor, government and community groups serve on some 7,300 vo-tech advisory groups and councils around the country.

Vocational-technical education is also a key partner in several important social programs. It provides most of the classroom training for unemployed and dislocated workers served by the Job Training Partnership Act. It also trains welfare recipients, preparing them for self-sufficiency, as part of the Family Support Act, a federal welfare reform initiative.

Funding

Vocational programs are supported by a combination of federal, state, local and private business funds. Most of the funding comes from state and local education budgets. Federal dollars provided to vocational education through the Carl D. Perkins Vocational and Applied Technology Act constitute about 11 percent of the total vo-tech budget. That federal share is now just over $1 billion.

Despite its small share of the total, federal support has driven much of the change in programs over the years. At present, a major focus of the Perkins Act is on boosting the tech prep concept and improving vocational programs for disadvantaged students and people living in economically depressed areas. Federal law also guarantees access to vocational programs for other special populations, including adults in need of training and retraining, single parents or homemakers, criminal offenders and participants in programs designed to eliminate sex bias and stereotyping.

Want to Know More?

For details about vocational-technical education in your community, call your local school district, vo-tech school, community college or technical institute. Your state's Department of Education also has a division dedicated to vo-tech education. The information in this brochure was provided by the American Vocational Association, the only national professional association representing all components of the field of vocational education.

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